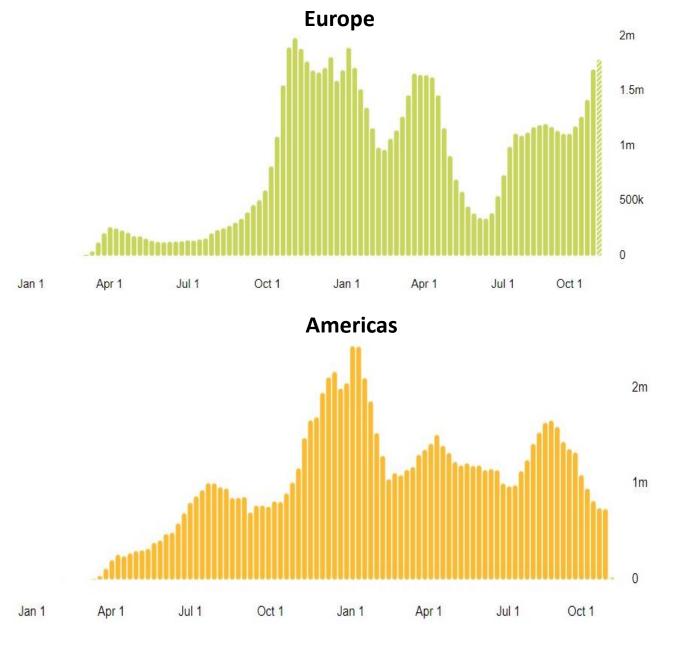
Virginia COVID-19 Surveillance Data Update

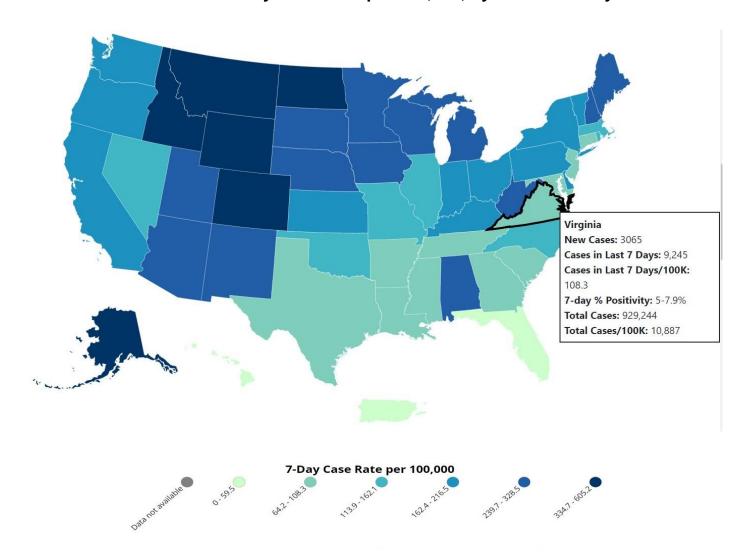
November 4, 2021





- Europe is seeing another COVID-19 surge with 1,786,313 cases for the week ending 10/25/21
- The Americas have 735,217 cases in comparison
- Eastern Europe, Spain, United Kingdom, and France are seeing the worst-case rates
- Attributed to low vaccination rates, vaccine hesitancy, and the encroaching winter weather
- The United Kingdom is seeing a spike in Delta variants AY4, AY3, AY6 and AY 4.2
- Currently AY 4.2 also known as Delta Plus is accounting for 6% of cases

US COVID-19: 7-Day Case Rate per 100,000, by State/Territory



	Cases in the Last 7 Days Per 100k Population			
Virginia	108.3 (-12.0%)			
U.S.	157.7 (+13.4%)			
Alaska	605.2 (-11.3%)			
Montana	467.4 (-17.3%)			
North Dakota	454.4 (-1.9%)			

Our Neighbors

Rates Higher than Virginia

West Virginia, **314.3** (-10.1%)

Kentucky, **164.4** (-23.5%)

North Carolina, **126.9** (-13.3%)

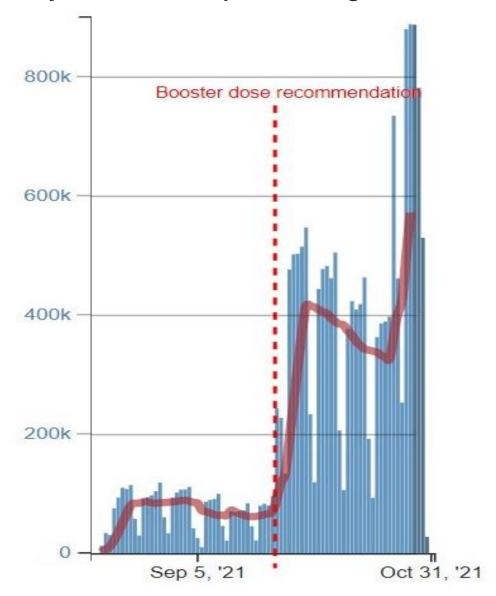
Rates Lower than Virginia:

Maryland, **82.8** (-7.1%)

District of Columbia, 83.7 (-3.0%)

Tennessee, **72.8** (-45.1%)

US Fully Vaccinated People Receiving a Booster Dose

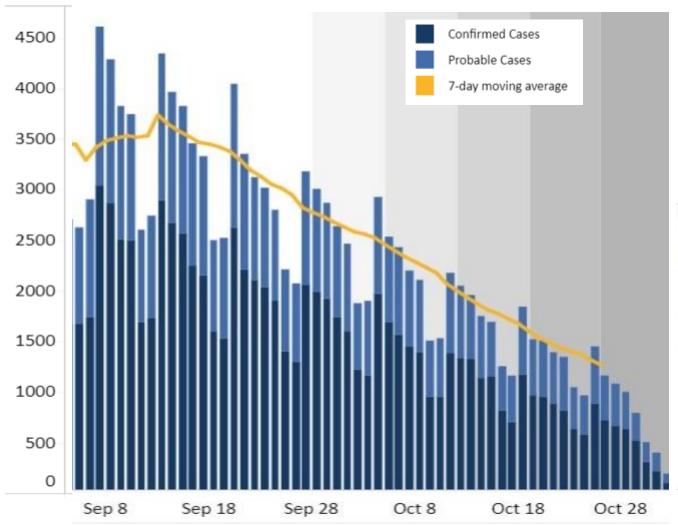


Over 15 Million people have received booster doses as of 10/28/21

The CDC Advisory Committee on Immunization Practices issued recommendations for an additional vaccine dose for the following people who are increased risk:

- Moderately to severe immunocompromised persons aged ≥ 12
 - They should receive and mRNA booster dose ≥
 28 days after primary series
- LTC residents, persons aged 18 ≥ 64 with underlying medical conditions, persons aged 18 ≥ 64 with increased due to occupational or institutionalized exposure
 - They should receive any type of approved booster dose ≥ 6 months after primary series
- Persons who received the J&J vaccine
 - They should receive any type of approved booster dose ≥ 2 months after primary series
- The volume of vaccine administered for J&J and Pfizer is the same as the primary series, but Moderna is ½ the primary series dose

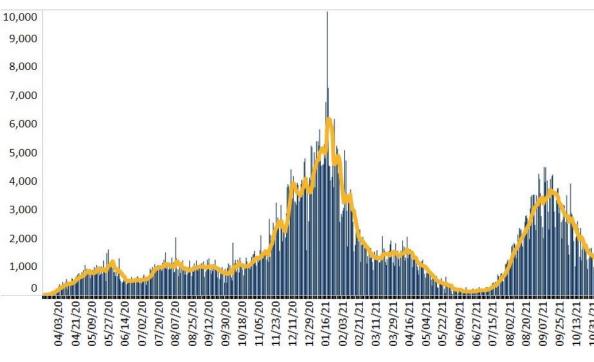
Cases by Date of Symptom Onset, last 60 days

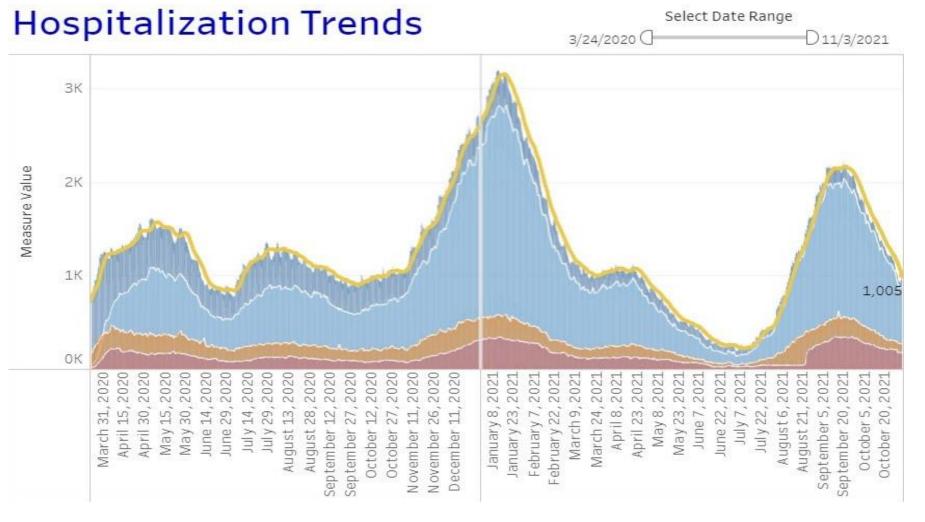


Gray shaded area illness may not have been reported yet

- Compared to last week, cases decreased to 1,293 (7-day MA) per day (-12.2%)
 - 79% lower than the January peak of 2021
 - Equal to the March low of 2021
 - 902% higher than the June low of 2021
- Hospitalizations decreased to 1,005 per day (-18.5%)
- **Deaths** decreased to 32.1 per day (-7.8%)

Cases, All Reporting Timeline



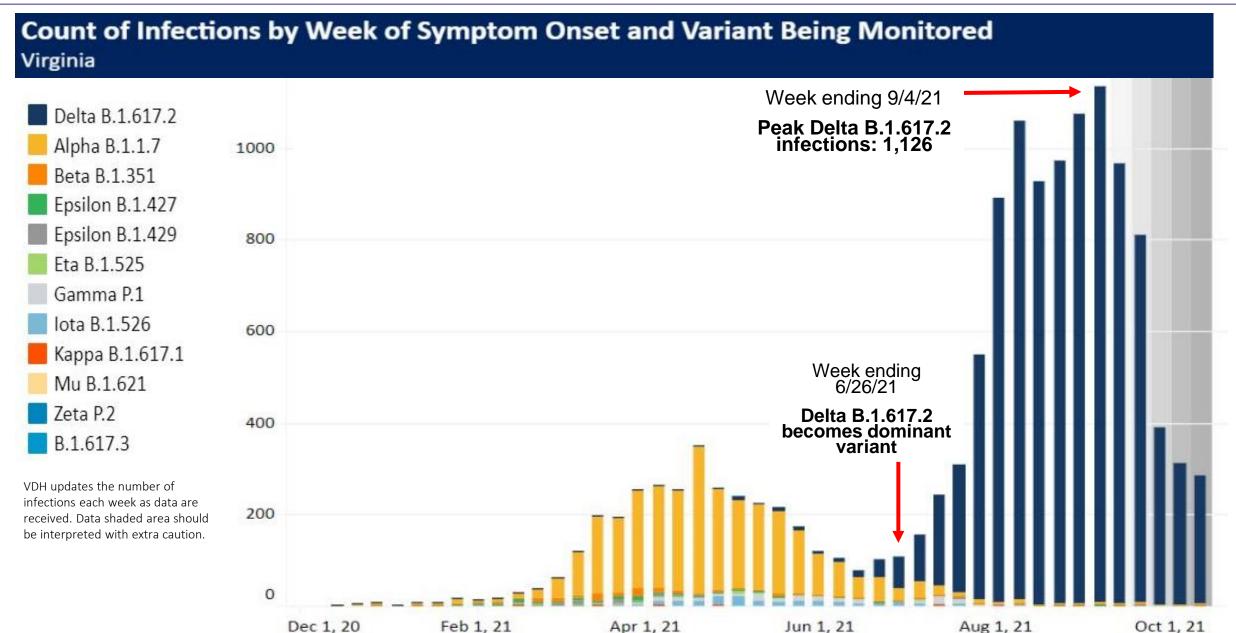


1,0057-day Average Current Hospitalizations

-18.5%
% Change in 7-day
Average

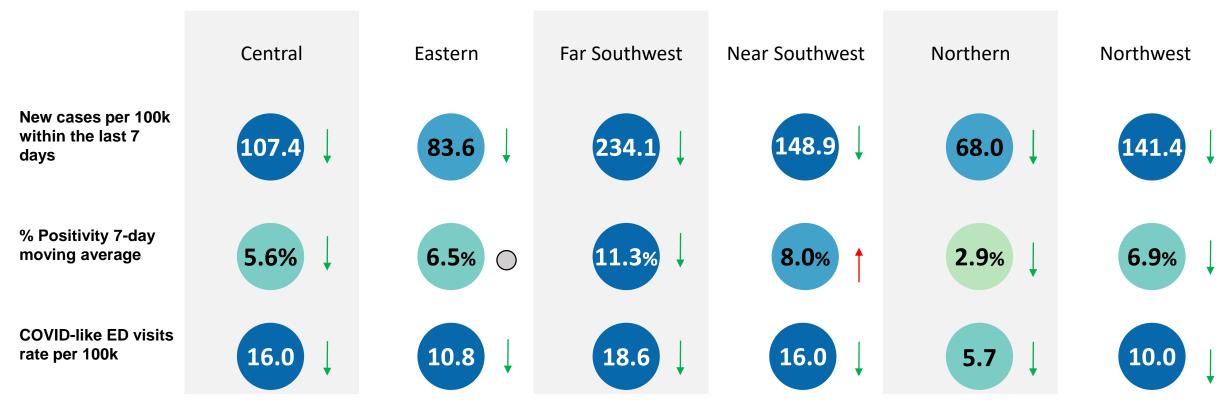
-68.1%
% Change from peak 7-day Average (Jan 2021)

- Confirmed COVID-19 Patients Currently on Ventilator Support*
- ICU Hospitalizations (Confirmed + Pending)
- CONFIRMED Hospitalizations
- Total Current COVID Hospitalizations (Confirmed + Pending)
- 7 Day Moving Average of COVID-19 Current Hospitalizations (Confirmed + Pending)



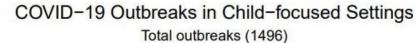
Source: Variants – Coronavirus (virginia.gov)

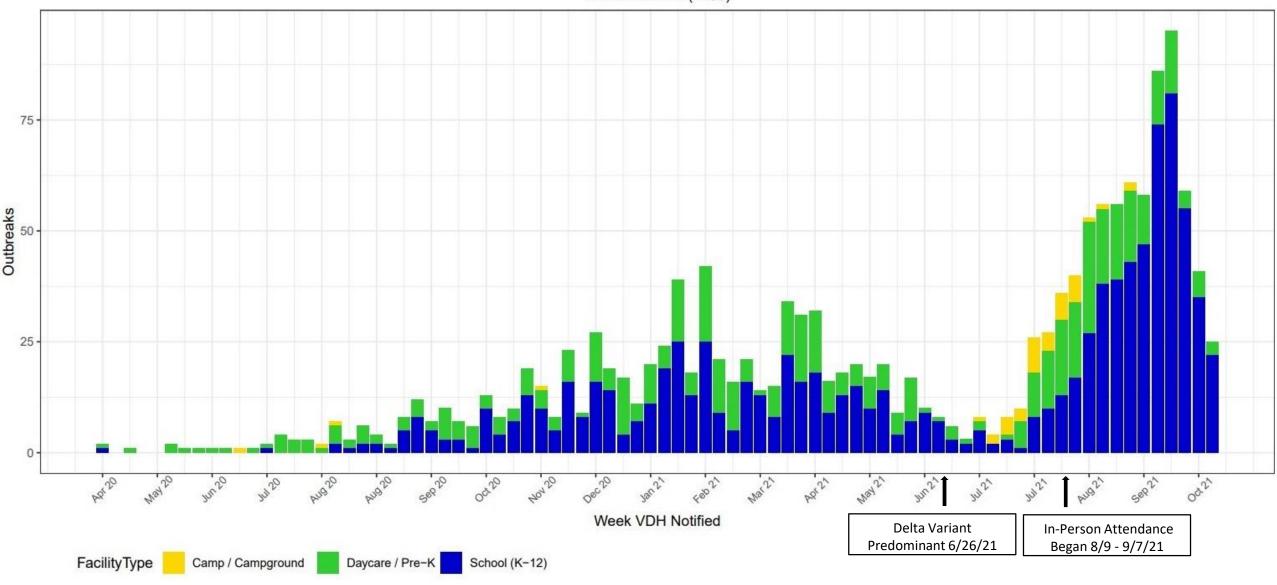
Metrics date: 11/3/2021

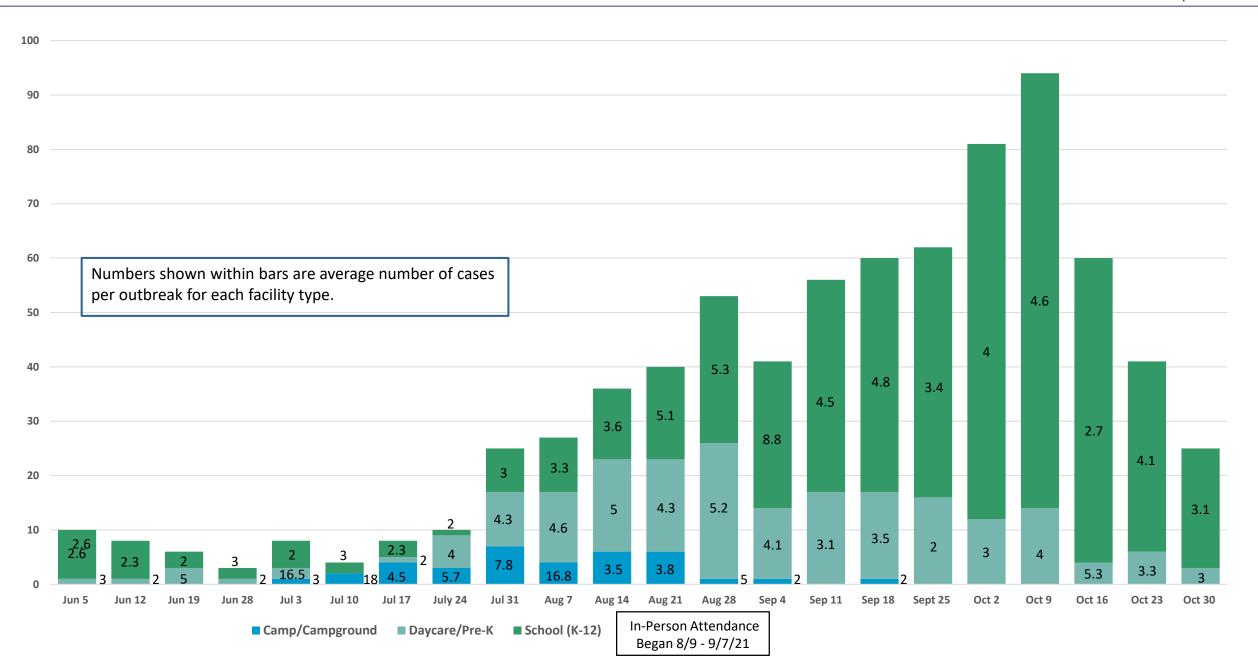


Burden	Level 0	Level 1	Level 2	Level 3	Level 4
New Cases	<10	10-49		50-100	>100
% Positivity	<3	3-5	5-8	8-10	>10
CLI ED Visits	<4		4-5.9		<u>></u> 6

Symbol	Trend	
†	Increasing	
+	Decreasing	
0	Fluctuating	







The impact of COVID-19 on health care workers: a closer look at deaths: September 2021

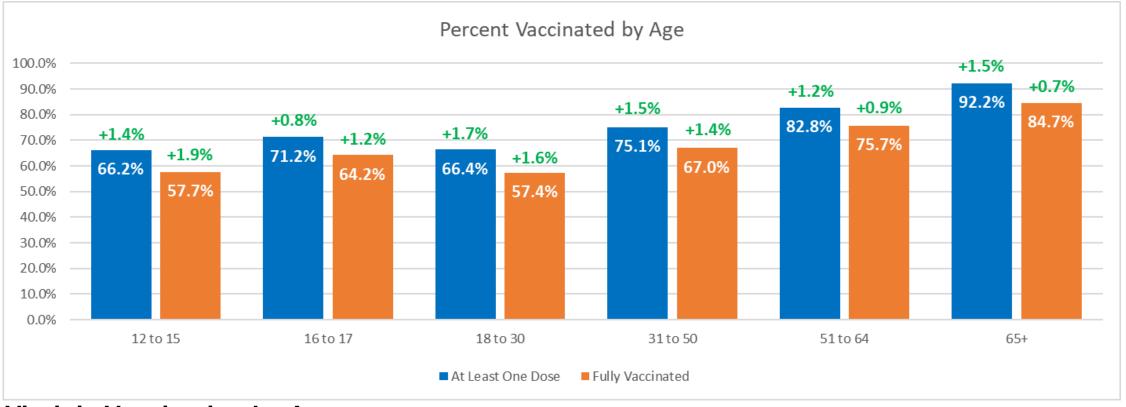
- In a WHO worldwide study, surveillance data reported **6,643 deaths in healthcare workers** which is estimated to be **60% lower** than the **actual death toll**
- Mounting evidence is showing the death of healthcare workers to be much greater that what has been reported, the estimated range is between 80,000 to 180,000 with a central population-based estimate of 115,500 deaths
- The underreporting of deaths in healthcare workers is more likely in poor countries with inadequate death registries
- Greater and continued efforts of advocacy for the **equitable distribution of vaccines** need to be made, as well as tailored communication systems must be designed in poorer nations

COVID-19 in Health-Care Workers: A Living Systematic Review and Meta-Analysis of Prevalence, Risk Factors, Clinical Characteristics, and Outcomes: January 2021

- A literature review/meta-data analysis examined 97 studies of the effect of COVID-19 in healthcare workers around the world
- A total of 230,298 health care workers were assessed, and results indicated that 7% 11% of workers had tested positive for COVID-19, 5% developed severe COVID-19 complications and 0.5% died
- Most of the COVID-19 impacted health workers worked in **non-emergency hospital settings** and **48%** of them were **nurses**, the most common symptoms were fever (57%), and dry cough (57%)

COVID-19 Breakthrough Infections in Vaccinated Health Care Workers: October 2021

- In an Israeli study evaluating breakthrough infections of COVID-19, 1497 healthcare workers who received the Pfizer vaccine 39
 (2.6%) health care workers experienced a breakthrough infection
- 26 (67%) of the health care workers with breakthrough infection presented with mild symptoms and the other 13 (33%) were asymptomatic

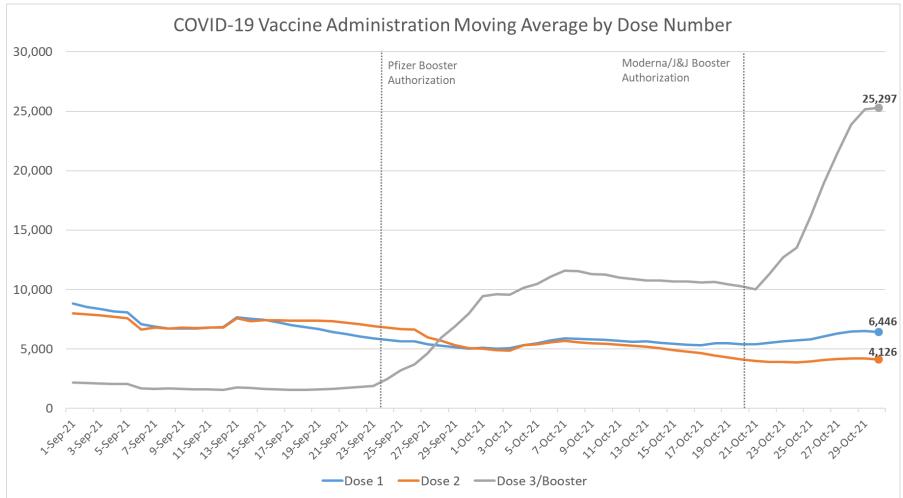


Virginia Vaccination by Age

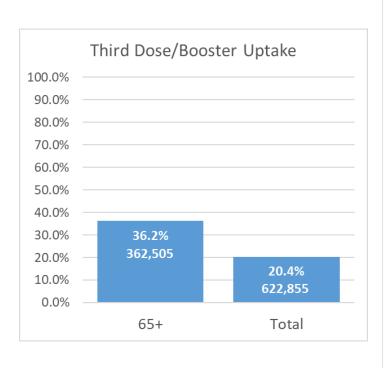
- √ 83.4% (+1.7%) of the Adult (18+) Population Vaccinated with at Least One Dose.
- √ 73.6% (+1.4%) of the Eligible (12+) Population Fully Vaccinated
- ✓ 92.2% (+1.7%) of Virginians 65+ and 67.9% (+1.5%) of 12 to 17 year olds have received at least one dose
- √ 63.0% (+1.5%) of the Total Population has been Fully Vaccinated
- √ 66.9% of the 5+ Population is Fully Vaccinated
- Green percent represents percent increase from two weeks prior

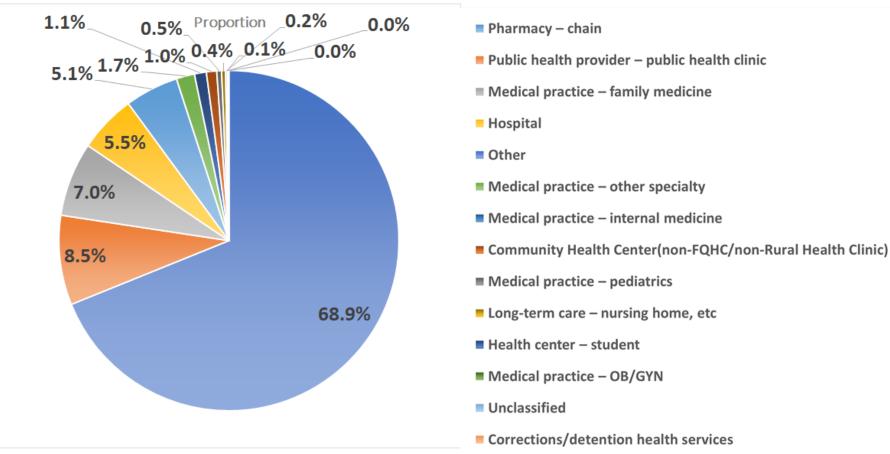
Third Dose/Booster shot administrations are increasing

- Third Dose/Booster administrations are seeing a very sharp increase following Moderna/J&J Booster Authorization
- First Dose administrations are increasing slightly while Second Dose administrations are plateauing

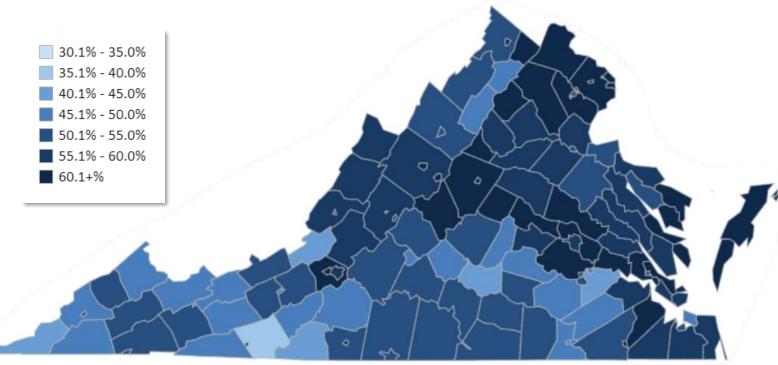


Third Dose/Booster Metrics





Percent of the Total Population with at Least One Dose by Locality



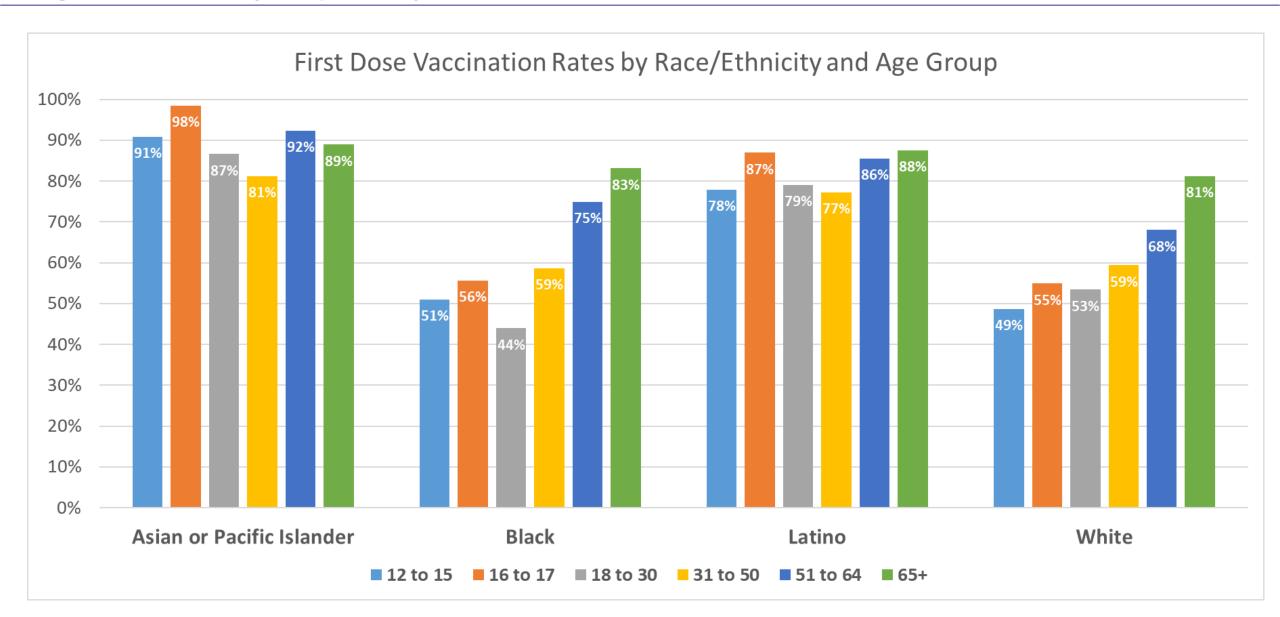
2013 SRHP Isserman Classification	12 to 15	16 to 17	18 to 30	31 to 50	51 to 64	65+	Grand Total
Mixed Urban	66%	74%	68%	69%	80%	93%	65%
Urban	69%	77%	60%	72%	80%	89%	75%
Mixed Rural	48%	56%	53%	60%	71%	84%	61%
Rural	40%	47%	47%	54%	67%	80%	74%
Grand Total	61%	68%	59%	67%	76%	87%	71%

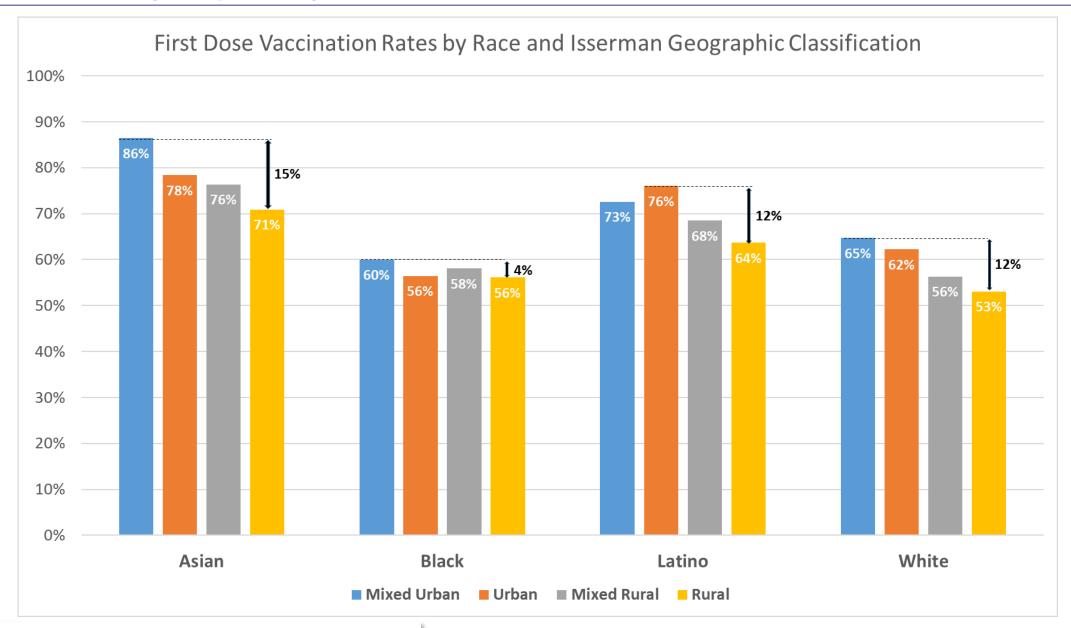
First Dose Vaccination Rate by Region for Total Population

Pagion Nama	1st Dose	% Change 2	
Region Name	Vaccination	Weeks	
Central	59.9%	+1.2%	
Eastern	57.3%	+1.7%	
Northern	69.4%	+1.2%	
Northwest	58.0%	+1.2%	
Southwest	51.9%	+1.2%	

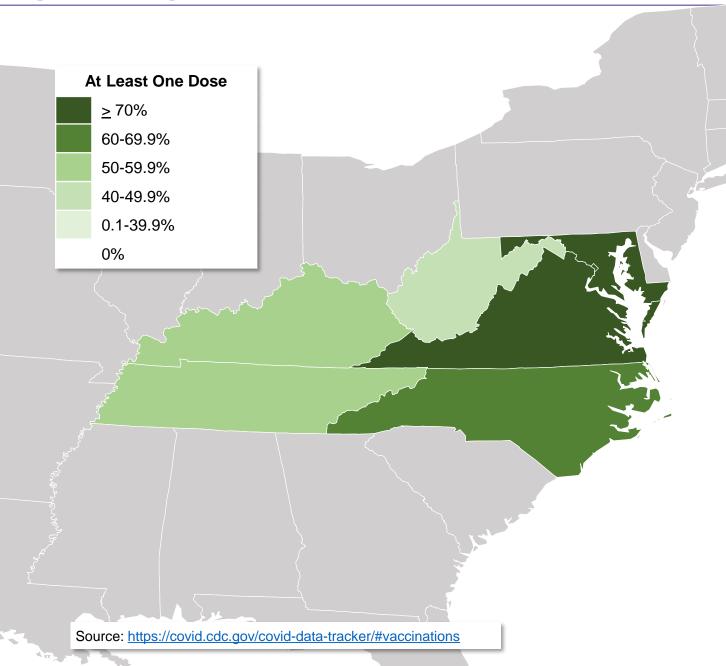
- 0 (-1 over 2 weeks) out of 133 Localities have a first dose vaccination rate below 40%
- 37 (+0 over 2 weeks) out of 133 Localities have a first dose vaccination rate above 60%
- There is a disparity across Urban and Rural areas by Age Groups, with Rural Adolescents the Lowest Vaccinated group

Source: COVID-19 Vaccine Summary – Coronavirus (virginia.gov)





Source: COVID-19 Vaccine Summary – Coronavirus (virginia.gov)



	At Least One Dose*	Fully Vaccinated*
Nationwide	66.9% (+1.4%)	58.1% (+1.8%)
D.C.	75.0% (+3.0%)	62.6% (+1.8%)
Kentucky	57.6% (-7.4%)	50.8% (-6.1%)
Maryland	73.1% (+1.4%)	66.3% (+1.4%)
North Carolina	64.8% (+4.0%)	52.8% (+1.7%)
Tennessee	54.7% (+1.5%)	47.8% (+1.7%)
Virginia**	71.3% (+1.9%)	63.2% (+1.6%)
West Virginia	49.0% (+0.6%)	41.0% (+0.2%)

^{*}Total population, includes out-of-state vaccinations

^{**}Differs from previous slide because all vaccination sources (e.g., federal) are included

^{***} Green percent represents percent increase from two weeks prior

^{****} Kentucky adjusted first dose rates due to some immunizations being counted twice